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A. C. WILLARD
Ans.

In Two Sections—Section Two

MECHANICAL ENGINEERING

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A.S.M.E. AFFAIRS

Chicago Meeting—Secretary's Letter—Committee Appointments Completed—Professional Sections Notes—Doings of Local Societies—Recent and Coming Section Meetings—Personals—Necrology—Employment Bulletin—Candidates for Membership

Chicago Meeting Plans Nearly Complete

The enthusiasm of the Chicago Committee, the coöperation of the various Professional Sections and the fortunate choice of Chicago as a meeting place combine to forecast a Spring Meeting that will demand attendance by every member.

The dates to keep in mind are May 23–26, and the place is the Congress Hotel, Chicago.

The Chicago Sub-Committee promises one session devoted to a consideration of the engineering development of Chicago as the rail-water gateway of the Middle West. The technical program will be supported by strong sessions arranged by the Professional Sections on Aeronautics, Fuels, Machine Shop, Management, Materials Handling, Ordnance, Power and Railroads. The Forest Products Committee is also preparing a program amplifying the interesting session held at the Annual Meeting. The policy of arranging plant visits in connection with the technical papers has been adopted by the Committee on Meetings and Program.

Secretary's Letter

P — C = V

The Secretary is grateful indeed for the inspiration and encouragement he gains in his visits to the Sections and Branches.

In Toledo, Dr. Quillin of the University addressed the Section in a most forceful manner, stating the motive behind all this Society's work in such a splendid manner and then summing it up in the formula given above so that no one will ever forget it.

In this formula P stands for production, C for consumption, and V for value. And applied either to the life of the individual or to an organization it is equally true; the value of that life or organization is in direct proportion to the amount by which its production exceeds its consumption.

At Bethlehem the University Club is as a matter of fact an engineering society, that is, the topics discussed are more frequently on engineering than other subjects. But this is the important part: the club is actively coöperating with the local Chamber of Commerce and the motive in its work can be best illustrated by quoting the announcement in the local paper:

SEWERAGE AND SEWAGE DISPOSAL IN BETHLEHEM

Important Topic to be Discussed by State Engineer Snow at University Club Dinner

The annual dinner of the University Club to be held at Kurtz's Restaurant at 7 o'clock, Tuesday, January 25th, will follow somewhat along the same lines as the dinners held in the past few years at which a speaker to present a subject of interest to the community was engaged.

In other words, the Club has endeavored to make these dinners of some value to the community from a civic standpoint.

What could be finer? What greater encouragement can be given to the Secretary of the A.S.M.E. than for him to see that the motive actuating all the work of the Society, and of the Secretary individually, is also that of so many societies and leaders?

Four hundred came out to this dinner, which shows that these functions can be as successful from the point of numbers when the topic has to do with the welfare of the community in which one lives as it can when the purpose is solely to provide an entertainment. And the satisfaction derived from the latter cannot be compared with that from the former.

The Secretary is confident that it will not be long before all engineering societies, national and local, together with their sections, will be putting the emphasis on their civic activities. In so doing they will have their professional work and comradeship made additionally wholesome by the satisfaction resulting from the fact that they have first interested themselves in the welfare of their communities.

CALVIN W. RICE, *Secretary.*

Joint Code of Ethics Committee

Responding to an invitation from our Society, the American Society of Civil Engineers has appointed Mr. Leonard Metcalf and Mr. Arthur S. Tuttle, and the American Institute of Mining and Metallurgical Engineers has appointed Mr. Philip W. Henery and Mr. Thomas H. Leggett to coöperate with the A.S.M.E. Special Committee on Code of Ethics.

It was the original recommendation of our Committee that such a joint committee be constituted so that if possible a Code of Ethics could be drafted for all engineers.

It is anticipated that recommendations of the Joint Committee will be presented at the Spring Meeting of our Society in Chicago in May.

Amendments to the Constitution

The two pending amendments to the Constitution, the one on extending the privilege of voting to Junior Members and the other on shortening the time required to complete an amendment to the Constitution, were held over from the Annual Meeting for lack of a quorum at the adjourned Business Session and cannot therefore be again presented until the next Annual Meeting, thus missing one General Meeting, the Spring Meeting.

During the year's delay which will ensue, it will be possible, at the Spring Meeting in Chicago in May, for any member of the Society to introduce any other amendment to the Constitution, and the Society is therefore confronted with a peculiar precedent, and the desirability for Past-President Miller's amendment, which was published in the October 1920 issue of MECHANICAL ENGINEERING, becomes all the more apparent. Under this proposed amendment,

changes in the Constitution may be recommended at *any* General Meeting (Annual or Spring) instead of only at a Spring Meeting as now, and completed at the next General Meeting. His amendment, if adopted, will remove the inflexibility which now exists and which has created the present situation. At the same time, it does not let down the bars.

Official Biographical Directory of the Four National Engineering Societies

The Library and the offices of the National Engineering Societies are constantly in receipt of inquiries for information about members of the National Engineering Societies and their personal and professional attainments.

Commercial publications giving this information have been undertaken from time to time, but are more or less dependent on a subscription to the issue for inclusion of a member's name in the book. Unsatisfactory correspondence has often followed, where an engineer answering the circular form but with no intention of buying the volume, found later that he was regarded by the publishers as having become a subscriber.

There is some doubt as to the extent of the demand for a publication of this nature and in order to inform their respective Publication Committees of the situation, the secretaries of the several societies have addressed a communication to the Local Sections with the request for a vote on the subject at the monthly meetings of the local gatherings.

If there is a demand for an official, formal directory which would be published under the auspices of the four National Engineering Societies, it is possible that these societies would favorably consider the issuance of such a volume.

This volume would contain material in regard to each man, somewhat along the line of Who's Who in America, that is, a statement of personal data and attainments with a brief description of work accomplished.

Supposing there are 50,000 members in the societies, and allowing a reasonable amount of space allotted to each name, at present prices it might require two volumes at $10 per volume.

An expression of opinion from members outside of the Local Sections is desired in this matter. If you are not within reach of a Local Section, send in your ideas in the matter to the Secretary.

Committee Appointments Completed

President Carman has now filled the vacancies on the standing committees for the year 1921 and most of these committees have organized and are busy on the year's program.

The Finance Committee has unanimously elected Mr. Erik Oberg as Chairman and Messrs. L. C. Marburg and S. D. Collett, Vice-Chairmen. All these gentlemen reside in New York City, though the other two members of the committee live in Detroit and Cleveland, respectively. Although the committees are decentralized from New York as much as possible, it is necessary so to arrange that a quorum of the Finance Committee can be obtained at short notice and also, with the present volume of monthly business of the Society, that at least one member of the Committee be instantly available for auditing bills. The Society now has a turnover of $50,000 a month and the number of bills to be passed for payment every week is quite large.

The Membership Committee has organized with Mr. R. F. Jacobus as Chairman. Since the Local Sections Committee, now handling the increase-of-membership work, anticipates 3000 new members this year, the Membership Committee, already probably the hardest-worked committee of the Society, will have its hands particularly full. The members of the Society should know of the long hours of faithful service rendered by this fundamental committee.

The Constitution and By-Laws Committee has a number of matters pending which have been referred to it by the Council, and since the geographical center of this Committee is now in the West, it is expected that an early meeting will be held in Chicago.

The Committee on Local Sections held a meeting in connection with the meeting of the Council and of the American Engineering Council in Syracuse on February 14 and 15. This will be reported separately.

The Committee on Professional Sections has had active subcommittees working on rules for conducting these sections and on developing affiliate membership therein. Though the by-laws provide for the government of these sections, many new problems have arisen now that they have actually commenced operation.

The Committee on Education and Training is being organized as two committees, one on Training for the Industries and the other on Relations with Colleges, which will handle the Student Branch work. The first of these committees organized in New York on February 5, with Mr. W. W. Nichols as Chairman.

A.S.M.E. Council Notes

The expression of the sentiment of President Carman that the Council meetings considered matters of great interest, led the Council to take a special vote urging all members of the Society to avail themselves of the privilege of attendance at Council meetings and acquaint themselves with the conduct of the Society's affairs. It was hoped that members serving on committees would be particularly interested.

The January meeting was held in New York, on the 14th, and there were present: President E. S. Carman; Vice-Presidents R. H. Fernald, W. B. Gregory, L. P. Alford, R. B. Wolf, J. L. Harrington; Managers F. O. Wells, E. F. Scott, C. L. Newcomb, H. M. Norris; Past-Presidents F. J. Miller, M. E. Cooley, C. T. Main, I. N. Hollis, D. S. Jacobus; Committee Chairmen R. V. Wright, W. H. Kenerson, E. B. Katte, A. M. Greene, Jr.; Guest, Charles Whiting Baker; Secretary, Calvin W. Rice.

Appointments. President Carman reported that he had made the following committee appointments to fill vacancies caused either by the resignation or expiration of terms of office:

Finance: Henry M. Lucas, T. H. Hinchman and S. D. Collett.
Membership: James W. Nelson.
Constitution and By-Laws: Arthur L. Rice and E. L. Ohle.
Standardization: E. C. Peck.
Research: F. G. Hechler.
Library: George A. Stetson and Sidney Bevin.
Tellers of Election: H. G. Tyler, Francis J. Steele and Richard S. Austin.

Finances. The Council expressed its hearty appreciation of the various committees for the way in which they had responded to the request of the Council in restricting their expenditures for the current fiscal year.

Local Sections. Petitions for a Section to be known as the Central Pennsylvania Section and to include territory within a radius of sixty (60) miles of State College, Pa., and for a Section at Spokane, Washington, were approved.

On the invitation of the Committee on Local Sections the April Council Meeting was set for Mobile, Ala., in connection with the joint meeting of the Local Sections of Atlanta, Mobile and New Orleans.

Education and Training. On recommendation of Past-President Hollis the Committee on Education and Training was divided into two main groups, as follows:

Relations with Colleges:

J. W. Roe, Chairman, Pierce-Arrow Motor Car Co., Buffalo, N. Y.
Lynn A. Scipio, Director of Research, Am. Soc. Heating and Ventilating Engineers, U. S. Bureau of Mines, Pittsburgh, Pa.
D. Robert Yarnall, Yarnall-Waring Co., Philadelphia, Pa.
R. H. Danforth, Case Schoool of Applied Science, Cleveland, Ohio.
H. G. Tyler, New York University, New York, N. Y.

Training for the Industries:

W. W. Nichols, Chairman, Allis-Chalmers Co., 50 Church St., New York, N. Y.
Charles R. Richards, Dean of Engrg. School, Cooper Union, New York, N. Y.
R. L. Sackett, Dean of Engrg. School, Pennsylvania State College.
J. C. Spence, Norton Co., Worcester, Mass.
Ira N. Hollis, Worcester Polytechnic Institute, Worcester, Mass.

A meeting of the latter group was called by the chairman for February 5, to be held in New York.

Exchange of Courtesies. The Engineering Institute of Canada requested an exchange of courtesies with our Society and the following resolution was passed:

WHEREAS, The Engineering Institute of Canada is one of the leading engineering societies on this continent; therefore, be it

Resolved, That The American Society of Mechanical Engineers exchange courtesies with The Engineering Institute of Canada, so that the members of each society may secure the publications of the other society at member's rates; and be it further

Resolved, That this exchange of courtesies be interpreted as an expression of the friendship existing between the engineers of Canada and the engineers of the United States.

Procedure for Adopting Codes. Upon the recommendation of Mr. F. R. Low, Chairman of the Power Test Codes Committee, a procedure for presenting and adopting codes of the Society was authorized.

Boiler Code. Interpretations Nos. 312, 313, 318, 322, 323, 325, 327, 329, 330 were approved and ordered published in MECHANICAL ENGINEERING. Messrs. H. V. Wille and Kenneth Rushton were approved on the Sub-Committee on Boilers of Locomotives.

Research. The Research Committee was appointed as the Advisory Board of the Engineering Division of the National Research Council with power to aid members of its sub-committees as required.

Standardization. The resignation of Henry Hess, Chairman of the Committee, was received with regret and resolutions of appreciation of the services of Mr. Hess for many years were ordered transmitted by the President and Secretary.

Publicity. The Chairmen of the Committees on Meetings and Program, Research, Local Sections, and Professional Sections were appointed a Committee on Publicity to supervise such publicity as is given to the Society's work. The Chairman of the Meetings and Program Committee was designated Chairman.

American Engineering Standards Committee. Col. E. C. Peck was appointed as representative of the Society on this joint body. Sponsorship with the American Institute of Architects and American Institute of Electrical Engineers for a Standard Code for Elevators was accepted.

U. E. S. Board of Trustees. Past-President Worcester R. Warner was appointed to represent the Society on this Board.

Adjournment. Adjournment was taken to meet in Syracuse on February 15, in connection with a meeting of the American Engineering Council.

CALVIN W. RICE, *Secretary*

Professional Sections Notes

Aeronautic Section. The Organization Committee of the Aeronautic Section has announced the result of the letter-ballot for the election of the Executive Committee.

Joseph A. Steinmetz, President of the Aero Club of Pennsylvania and member of the firm of Janney, Steinmetz and Company, Philadelphia, Pa., has been elected Chairman.

Thurman H. Bane, Major, Air Service, McCook Field, Dayton, Ohio, has been elected Vice-Chairman.

Edward P. Warner, Professor, Massachusetts Institute of Technology, Cambridge, Mass., Elmer A. Sperry, President, The Sperry Gyroscope Company, Brooklyn, N. Y., and Ralph A. P. Preston, of the Goodyear Tire and Rubber Company, Akron, Ohio, have been elected as the three other members of the Executive Committee.

Edwin E. Aldrin, Lieutenant, Air Service Engineering School, Dayton, Ohio, has been designated as Secretary of the Section.

Ordnance Section. Plans are shaping up for the initial professional meeting of this Section, to be held at Rock Island Arsenal on the adjournment of the Spring Meeting.

Forest Products Section. The Professional Sections Committee favors such a section. Anyone interested should communicate with Mr. Thos. D. Perry, Grand Rapids Veneer Works, Grand Rapids, Mich.

Year Book to be Issued Later

Because of the fact that the 1920 Year Book was corrected to March 1, and on account of printing difficulties was not issued until July 1, it has been decided to postpone the publication of the 1921 Year Book until next October. The book will be corrected to about August 1. The list of officers and committees, usually published in the front of the Year Book will be abstracted in the April issue of MECHANICAL ENGINEERING.

DOINGS OF LOCAL SOCIETIES

CLEVELAND ENGINEERING SOCIETY

The Cleveland Engineering Society held a joint meeting with the Cleveland Section on February 1, 1921. R. R. Abbott, for some years metallurgical engineer for the Peerless Motor Car Company, spoke on the Uses of Alloy Steel in the Machine Tool Industries. Mr. Abbott has met and solved many unusual metallurgical problems in his work with the Peerless Company and has had an opportunity to watch the development of special alloy steels and their uses. His instructive discussion of the subject made the meeting a most interesting one.

ENGINEERS' SOCIETY OF MILWAUKEE

A meeting of the Engineers' Society of Milwaukee was held under the auspices of the Local Section, A.I.E.E. on January 19. This meeting was of special local interest as it was addressed by A. W. Berresford, vice-president and general manager of The Cutler-Hammer Mfg. Co. Mr. Berresford has been very active in the affairs of American engineering societies, holding many offices, and in acknowledgment of his abilities and devotion he was last year elected president of the American Institute of Electrical Engineers.

Mr. Berresford's address dealt with the engineer's relation to the national problems of the development and conservation of our own resources, production and distribution, and relation of capital and labor, and with his participation through the Engineering Council in their solution.

INDIANA ENGINEERING SOCIETY

The Forty-First Annual Meeting of the Indiana Engineering Society was held jointly with other local chapters of Engineering societies at the Claypool Hotel, Indianapolis, January 27–28, 1921. The following excerpts from the program are of interest to us:

Operating Characteristics of Small Steam-Driven Pumps, L. V. Ludy, Lafayette

Some Factors Affecting Locomotive Design, Harry Rubenkoenig, Lafayette

The Manufacture of Silent Chain (illustrated), Charles R. Weiss, Link Belt Co., Indianapolis

Some Problems in Supplying Power Service to Rural Communities, D. D. Ewing, Lafayette

Superpower Station and Transmission System for Central Indiana, F. L. Ray, Anderson

Protection of Rural Distribution, D. L. Curtner, Lafayette

The New 600,000 Volt Testing Laboratory at Purdue University, C. Francis Harding, Lafayette.

PHILADELPHIA ENGINEERS HOLD SYMPOSIUM ON HYDROELECTRIC POWER

The Philadelphia Sections of the American Society of Civil Engineers, The American Society of Mechanical Engineers, and the American Institute of Electrical Engineers, presented a symposium on Hydroelectric Power and Distribution under the auspices of the Philadelphia Engineers' Club on January 21. The following papers were presented:

The Modern Hydraulic Turbine, by Frank H. Rogers, hydraulic engineer, William Cramp & Sons Ship & Engine Building Co.

The Application of a New Method of Water Measurement in the Efficiency Tests of the 37,500-Hp. Turbines of the Niagara Falls Power Co., by Norman R. Gibson, hydraulic engineer, Niagara Falls Power Co.

Speed Regulation of the Hydraulic Turbine, by Raymond D. Johnson, consulting engineer, New York City

The Present Trend of Hydraulic Turbine Development, by Lewis F. Moody, consulting engineer, William Cramp & Sons Ship & Engine Building Co.

Niagara Falls Power Development and Its Products in Philadelphia, by John L. Harper, vice-president and chief engineer, Niagara Falls Power Co.

Electrical Features of Hydroelectric Power, by David B. Rushmore, chief engineer, power and mining department, General Electric Co.

Engineers of Lehigh Valley Form Club

At a meeting of representative engineers and technical men of the Lehigh Valley, including members of the American Electro-Chemical Society, American Society of Civil Engineers, American Institute of Electrical Engineers, American Association of Chemists, American Institute of Mining and Metallurgical Engineers, American Society for Steel Treating, American Society of Mechanical Engineers and several other societies, at the Bethlehem Club, February 7, it was resolved to organize the Engineers' Club of the Lehigh Valley.

The purposes of this club are: first, to facilitate the meetings of engineers and technical men for discussion of technical questions; second, to take up civic, state, and national questions involving engineering and technical knowledge in which the interests of the public may be furthered; third, to promote social intercourse and personal acquaintanceship among its members.

Dr. J. W. Richards, of Lehigh University, was elected temporary chairman, and Professor T. E. Butterfield was elected secretary pro tem. The executive committee will consist of a representative of each of the national societies having members in the Lehigh Valley. Messrs. Larkin, Reinicker and Brobston are the members of the Paper Committee.

The first meeting of the Engineers' Club of the Lehigh Valley, held at Lehigh University on February 24, was in charge of the newly formed Lehigh Valley Section of The American Society of Mechanical Engineers. The subject of the meeting was The Super-Power System and the Industries of the Lehigh Valley, and the speaker was Harold Goodwin, an engineer who is in intimate touch with this development.

President Carman's Day in Cincinnati

Over 150 members of the Local Section welcomed President Carman at an evening meeting held on the occasion of his visit to Cincinnati. Mr. Carman's topic was Engineering Opportunity in America's World-Wide Activities. The members present followed him with great interest as he told of the industrial conditions in the various war-worn nations and outlined America's duty with regard to the industrial rehabilitation of those countries and her obvious destiny in the future. President Carman spent several months in Europe directly following the close of the war, studying the economic situation, which resulted in giving him a first-hand impression of conditions there. J. A. Pollak, chairman of the Local Section, presided at the meeting, which was followed by a buffet lunch.

Preceding the meeting, President Carman spent the day in the various engineering plants of Cincinnati and was entertained at dinner by the directors of the Engineers' Club of Cincinnati and the Executive Committee of the Local Section.

Recent Section Meetings

Akron. February 25. Heat Balance of a Turbine, by C. Harold Berry of the Detroit Edison Co., Detroit, Mich.

Atlanta. January 4. Moving pictures of the Manufacture of Wrought Iron Pipe, from the A. M. Byers Co.

February 23. Joint meeting with the Birmingham Section in Carnegie Library, Atlanta, Ga.

Baltimore. January 18. How to Organize the Economic Forces of the Community, by Charles Ferguson, New York City.

Birmingham. December 29. Glimpses of Present Day Palestine and Jerusalem, by H. Y. Carson, of the American Cast Iron Pipe and Foundry Co. This address was illustrated with lantern slides.

Boston. January 18. Joint meeting with the A.I.E.E. and Boston Section of the Civil Engineers. Electrical Features of the Super Power Survey, by W. S. Murray, of the Department of the Interior. This address was illustrated with lantern slides.

February 8. Joint meeting with the A.I.E.E. Recent Water-Wheel Developments and Settings, by W. M. White, Chief Engineer, Hydraulic Department, Allis-Chalmers Mfg. Co., Wilwaukee, Wis.

Buffalo. February 15. Modern Practice in Arc-Welding, by A. M. Candy, of the Westinghouse Electric & Mfg. Co.

Cincinnati. February 1. At the Western Power Station of the Union Gas & Electric Co. Inspection trip through the plant.

Cleveland. February 1. In the Cleveland Engineering Society's Rooms. Uses of Alloy Steel in the Machine-Tool Industries, by R. R. Abbott, of the Peerless Motor Car Co.

Colorado. February 25. Meeting in the Metropole Hotel.

Columbus. February 11. Meeting in the Southern Hotel.

Connecticut:

Hartford. February 7. At the City Club. Industry's Supply of Energy, by George Otis Smith, Director of the U. S. Geological Survey.

Meriden. January 19. Fuel Economics, by C. C. Trump, Mgr. of the N. Y. Office of the Fuller Engineering Co. Talk was illustrated with lantern slides.

New Haven. February 9. At the Mason Laboratory, New Haven, Conn.

Waterbury. February 7. At the Chase Co.'s Office Building, Waterbury, Conn.

Detroit. February 18. Joint meeting with the Detroit Engineering Society, in the Auditorium of the Board of Commerce. The Engineer in Industrial Reconstruction, by L. P. Alford, Editor, *Management Engineering.*

Eastern New York. January 13. Design and Construction of Superheaters, by H. B. Oatley, of the Locomotive Superheater Co., N. Y. C.

Indianapolis. January 27 and 28. Joint meeting with the A.I.E.E., Indiana Engineering Society, and Civil Engineers.

Los Angeles. January 18. At the Edison Building. Precision Gages of the Johannson Type, by Dr. J. A. Anderson, of Mt. Wilson Solar Observatory, Pasadena, Cal.

February 11. President Carman spoke on Engineering Opportunities in America's World Wide Activities.

Metropolitan. January 28. Joint meeting with the A.I.E.E. A detailed account of this meeting appears on page 216 of Section One of this issue.

Milwaukee. January 19. Joint meeting with the A.I.E.E. and the Engineering Society of Milwaukee. An account of this meeting appears on page 31 of Section Two.

Coming Section Meetings

Atlanta.

March 22. At Carnegie Library, Atlanta, Ga.

Baltimore.

March 22. At the Engineers' Club, Baltimore, Md. Subject: Time Study and Motion Study as Fundamental Factors in Planning and Control, by Frank B. Gilbreth, of Montclair, N. J.

Boston.

March. Joint meeting with other engineering societies. Subject: Diesel Engines.

Cleveland.

March 1. In the Cleveland Engineering Society's Rooms. Subject: Power Plant Evolution, by C. F. Hirshfeld, of the Detroit Edison Co., Detroit, Mich.

Colorado.

March 25. At the Metropole Hotel, Denver, Col.

Philadelphia.

March 22. At the Engineers' Club, Philadelphia, Pa. Subject: Problems of the Young Engineer.

Toledo.

March 17. At Toledo Railways & Light Co., Toledo, Ohio. Subject: Distilled Boiler Feed Water, by George R. Lyons, of the Power Equipment Co. Stereopticon slides will accompany this talk.

Tri-Cities.

March 10. At Rock Island Chamber of Commerce, Rock Island, Ill. Subject: Apprenticeship: Past, Present, and Future, by Wilson P. Hunt, of Moline Tool Co.

Metropolitan.

March 25. In the Engineering Societies Building. Subject: Industrial Relations. Professor Walter Rautenstrauch will be in charge of this meeting.

Important!

About the third week in April, there will be a joint meeting in Mobile, Ala., of the Birmingham, Atlanta and New Orleans Sections. The Council and Local Sections Committee will hold their April meeting in conjunction with this meeting.

New Orleans. February. Joint meeting with the Louisiana Engineering Society in the Louisiana Engineering Society's Rooms.

Ontario. February 2. Joint meeting with the Engineering Institute of Canada at the King Edward Hotel, Toronto. Effects of Corrosion on Steel Pipe and the Manufacture of Very Large Steel Pipes up to 96 inches, by F. N. Speller, of the National Tube Co., Pittsburgh, Pa; Aeroplane Wing Tips and Wind Channel Intakes, both by J. H. Parkin, Jr., of the University of Toronto.

January 21. Special meeting on the Toronto Water Works and Main Pumping Station. Illustrated address by Jas. Milne, M.E. and E.E. of the City of Toronto. Inspection trip through the Main Pumping Station.

Philadelphia. February 28. A Broader Field for the Engineer, by Professor Dexter S. Kimball, Dean of Engineering, Ithaca, N. Y.

St. Louis. January 29. Visit to the Key Boiler Equipment Co., E. St. Louis, Mo.

San Francisco. February 3. Engineering Opportunities in America's World Wide Activities, by President E. S. Carman. Prof. Wm. H. Wright, of the Lick Observatory, Mt. Hamilton, Cal., spoke on the subject of a recently perfected astronomical device for determining the exact dimensions of stellar bodies, the work of Prof. A. A. Michelson, of the University of Chicago.

Toledo. February 18. Photographing Sound Waves, by Dr. D. C. Miller, of the Case School of Applied Science, Cleveland, Ohio. Stereopticon slides accompanied this talk.

Utica. February 10. At the Utica Gas & Electric Co. Auditorium, Utica, N. Y.

Washington, D. C. January 28. Wind Tunnels and Their Uses, by Dr. L. J. Briggs, Chief, Division of Engineering Physics. This talk was illustrated. Measurements of Air Resistance of Projectiles in Actual Flight, by Dr. E. A. Eckhardt, Chief of Sound Section.

Washington State. January 20. In the Assembly Hall, Chamber of Commerce, Arctic Building. Skagit River Project, by C. F. Uhden, Chief Engineer. Illustrated with lantern slides.

Worcester. January 5. Production of Leather and Leather Belting, by F. H. Small of the Graton & Knight Mfg. Co., Worcester, Mass. Three reels of motion pictures were shown during this lecture. Power Transmission by Leather Belting, by F. P. Lindh, of the same company as Mr. Small. This address was illustrated with lantern slides.

PERSONALS

O. W. SANDERSON, formerly assistant engineer of mechanical inventions with the B. F. Goodrich Company, Akron, Ohio, has resigned his position to become secretary and treasurer of the Empire State Engine Corporation, with executive offices in New York, N. Y.

THOMAS L. WILKINSON, for the past ten years in charge of the operating department of the Intermountain Railway, Light & Power Co., a western utilities corporation operating some fifteen plants, has retired from that department and has resumed his consulting work, also design and construction of power and industrial plants, investigation operation and reports on public utilities, appraisals and valuations. His offices will be in Denver.

GEOFFREY C. BROWN, formerly with the Northern Electric Company, Montreal, is now superintendent of manufacturing, Habirshaw Electric Cable Company, Yonkers, N. Y.

WALTER F. LUSK has been appointed mechanical electrical engineer for the International Agricultural Corporation, Mulberry, Fla. He was formerly with the General Utilities & Operating Co., Baltimore, Md.

DANA W. WILBER, formerly assistant engineer to S. Firestone, civil engineer of Rochester, N. Y., is now associated with the Deerben Engineering Associates, Boston, Mass.

IRA T. HOOK announces that he is now assistant professor of strength materials in charge of the Materials Laboratory, Mason Engineering Laboratory, Yale University. He was formerly employed by the General Motors Corporation as expert on physical testing in the Detroit laboratory.

FELIX J. WASILKOWSKI has recently been promoted from assistant to works manager to production and efficiency engineer of The Central Metal Products Corporation, College Point, N. Y., formerly the empire Art Metal Company, Inc.

JOHN R. LEVALLY, formerly sales engineer with the Chicago office of the Locomotive Superheater Company, has been appointed district manager of a new branch recently opened by that company, with headquarters in Pittsburgh, Pa.

JOSEPH J. ZUMBERG has severed connections with The Oesterlein Machine Company of Cincinnati and has taken a position as designer for the Cincinnati Grinder Company.

BRUNO C. LECHLER, formerly general manager for the S. S. Hepworth Company of New York City, is now manager of the Sugar Machinery Department of the Fletcher Works, Philadelphia.

FREDERICK G. KENYON, formerly chief checker in the tool drafting room of the Bullard Machine Tool Company, has resigned and is now instructor in mechanical and architectural drafting and machine design at the State Trade School, Bridgeport, Conn.

SOLOMON E. GILLESPIE, formerly assistant engineer of The Murray Company, Dallas, Tex., has opened an office as consulting engineer in Dallas.

T. B. HOLMES, who until recently was with The Terry Steam Turbine Company of Hartford, is now connected with The K. B. Noble Company of Hartford, as sales engineer.

STEPHEN THOMAS has been appointed combustion engineer for Day & Zimmermann, Inc., Philadelphia. He was formerly with the E. I. duPont de Nemours & Co. of Wilmington, Del., as combustion engineer.

HARRY P. MEREDITH, formerly manager of manufacturing of the Curtiss Aeroplane & Motor Corpn. of Garden City, L. I. and Buffalo, N. Y., has become connected with the Maxwell-Chalmers Motor Company, Inc., of Detroit, Mich., as general works engineer in charge of all building design, changes on construction, plant maintenance and power plant operation for all of the company's plants in Detroit, Dayton, Ohio, Newcastle, Ind., and Canada.

GEORGE S. BLANKENHORN, who was formerly experimental engineer of the Allis-Chalmers Manufacturing Company, and engineer of steam and propulsion machinery of the American International Shipbuilding Corporation, has been chief engineer for the Coen Company, San Francisco, since last August.

FREDERIC GRIMMER, formerly superintendent of the Columbia Hoist & Machine Co., Flushing, L. I., N. Y., is now general manager of the National Indicator Company, Long Island City, N. Y.

JOHN J. MUIR, who until recently was connected with the United States Shipping Board, Emergency Fleet Corporation, has opened offices in Seattle, Wash., to practice as a consulting engineer in marine and general engineering work.

HORACE H. LANE, consulting and designing engineer, is senior member of the newly organized firm of Lane, Davenport & Peterson, engineers and architects, of Detroit.

RAY L. SOMERS has recently resigned his position as plant engineer for the Greenfield Tap and Die Corporation of Greenfield, Mass., and opened an office as industrial engineer in Providence, R. I.

W. H. BOND, formerly mechanical engineer for The Foundation Company, New Orleans, is now with Joubert & Goslin Machine & Foundry Co., Birmingham, Ala.

ALBERT KINGSBURY will henceforth conduct his business of designing, manufacturing, and selling Kingsbury thrust bearings, under the name of Kingsbury Machine Works. His new office and factory are located at Frankford, Philadelphia, Pa.

CHARLES D. H. KELLOGG, formerly manufacturing engineer for the Coe-Stapley Manufacturing Corporation, West Haven, Conn., is now with the Steele and Johnson Manufacturing Company of Waterbury, Conn.

JOHN HUNTER has severed his connection with the Standard Shipbuilding Corporation of Shooters Island, S. I., N. Y., and is now chief engineer for the Heine Safety Boiler Company, St. Louis, Mo.

HARRY A. OSWALD, formerly chief engineer for the Quaker City Corporation of Philadelphia and the Garbowski Motor Truck Company of Detroit, and general manager for the Meriden Manufacturing Company of Indianapolis, has recently been appointed general manager and secretary-treasurer of the Hamilton Motors Company, Grand Haven, Mich.

VALDEMAR B. FISHER, who was formerly representing the Midvale-Cambria Steel Company in Philadelphia and vicinity, is now representing the Atlas Crucible Steel Company in the same district.

JAMES R. LOWE has been appointed general sales manager of the Harrisburg Foundry and Machine Works, with headquarters at Harrisburg. Prior to this connection he was located at Anderson, Ind., as sales engineer for the Midwest Engine Company.

W. C. ROBBINS, of Robbins & Hemple, consulting engineers of Buffalo, announces that for the past ten months he has been general manager for the Eberhart Steel Products Co., Inc., which makes a specialty of automatic screw machine parts, gas engines and airplanes.

ERNEST GLEDHILL, formerly assistant equipment engineer for the Union Metallic Cartridge Company, Bridgeport, is now connected with the General Electric Company, Bridgeport.

RUSSELL JAQUES is now mechanical engineer for the Jaques Engineering Company, New York City. He was formerly designer for the Raymond Concrete Pile Company.

JAMES MACGUIRE, formerly chief inspector of power plant equipment, Air Nitrate Corporation, Muscle Shoals, Ala., is now master mechanic for D. P. Robinson & Co., Inc., and is located at the Colfax Power Station which that company is constructing for the Duquesne Light Company of Pittsburgh.

H. H. MILLS, until recently president of Mills & Sloan, Inc., of Albany, is now consulting engineer, G. Washington Coffee Refining Company, New York, N. Y.

A. E. WINDLE, formerly plant engineer, International Time Recording Company, Endicott, N. Y., is now with the Tide Water-Power Company, Wilmington, N. C.

THOMAS R. ALMY, who was formerly engineer for the Atlantic Corporation, Freemans Point, N. H., is now employed in New Bedford, Mass., as plant engineer at the Sharp Mills.

C. E. ANDERSON is now designer for the American Machine & Foundry Co., of Brooklyn, N. Y. He was formerly engineer for the E. W. Bliss Company of Brooklyn.

James W. Armour, who has been stationed at the Detroit, Mich., office of the Murphy Iron Works is now located at the Worcester, Mass., branch of the Sanford Riley Stoker Company.

Albert A. Dowd, founder and formerly president of the Service Engineering Company, Inc., New York City, has severed his connection with that company and formed a new organization to be known as the Albert A. Dowd Engineering Co., New York. Mr. Dowd is president and general manager.

Charles F. Eveleth, formerly with the Goethals, Wells & Co., Inc., New York, is now in Cleveland, Ohio, with Clark, MacMullen & Riley, consulting engineers.

Charles Froesch has resigned as chief engineer of the S. W. Merritt Company, New York City, to become associated with William E. Kemp, carburation specialist of New York.

Edward C. Gaines, of the Mead-Morrison Mfg. Co., Chicago, Ill., is now in Australia in charge of the erection of a large coal handling plant at Sydney, and is looking after other interests of the company in Australia.

Lester Goodman, formerly with the Beech-Nut Packing Company of Brooklyn, is now field engineer for The Chas. E. Bedaux Company, industrial engineers, Cleveland, Ohio. Mr. Goodman is at present located in Boston, Mass.

Irving G. Grundel, formerly superintendent of refining for the Union Oil Company of California, at Avila, Cal., is now assistant superintendent of the Humble Oil & Refining Company and is located at Houston, Tex.

R. B. Fehr has recently become associated with The Dayton Photo Products Company of Dayton, Ohio, as engineer-physicist and head of the optical department.

D. B. Morris has been transferred from the Repauno Plant to the Carney's Point Plant of the Du Pont Engineering Company.

Samuel William Dudley has recently retired as chief engineer of the Westinghouse Air Brake Company, with headquarters at the Wilmerding, Pa., plant, to accept a professorship in mechanical engineering at Yale University. Mr. Dudley has been with the Westinghouse Company for seventeen years and has become prominent in steam and electric railway circles.

A. E. Call, formerly with the Queen City Coal Company, Cincinnati, is now with the Island Creek Coal Company, New York, N. Y.

W. J. Davis, Jr., who has been Pacific Coast engineer for the General Electric Company, is now in the railway and traction engineering department of that company at Schenectady, N. Y.

C. M. Eason is now vice-president of the Samson Tractor Company, Janesville, Wis. He was formerly vice-president of the Hyatt Roller Bearing Company.

Frederick R. Pratt has severed his connections as engineer with the B. B. & R. Knight, Inc., of Providence, R. I., and is now engineer in charge of all work for the Whitin Machine Works in China and Japan. He is located at Shanghai, China.

R. S. Rowlett is at present employed in the engineering department of the Eastern Manufacturing Company at South Brewer, Me. He was until recently with the Hyatt Roller Bearing Company, Worcester, Mass.

NECROLOGY

J. WENDELL COLE

J. Wendell Cole, district manager of William Sellers & Co.'s tool and drill-grinder department and the Detroit Emery Wheel Co., died on January 18, 1921 of angina pectoris. Mr. Cole was born in Trenton Falls, N. Y., on June 6, 1842, and received his education in the schools of New York City. He served his apprenticeship in the machine trade with the old Novelty Iron Works, which was the training school of so many of the early members of the Society. His drafting experience was obtained in designing steamship machinery while in charge of construction in that office. He was also chief draftsman in the office of the chief engineer of the Hoosac Tunnel. For two years Mr. Cole was connected with the Fuel Saving Furnace Co., specializing in steam pumps and boiler feeders. It was in 1885 that Mr. Cole became connected with the William Sellers & Co., and in 1876 with the Detroit Emery Wheel Co. in the capacity of district manager.

When as a young man, Mr. Cole was agent for a pump company, he installed the first force pump in a fireboat in New York Harbor, the *John Fuller*. He was a life member of The American Society of Mechanical Engineers, joining the organization three years after its founding in 1880. He was the honorary president of the Ohio State University Student Branch Section at the time of his death.

HORACE ELGIN DODGE

Horace E. Dodge, vice-president and general manager of Dodge Brothers, Detroit, Mich., died on December 10, 1920, at his home in Palm Beach, Fla. Mr. Dodge was born in Niles, Mich., in 1869, and was educated in the schools there. From the high school in Niles, Mr. Dodge and his brother, John F. Dodge, who died about a year ago, entered their father's machine shop; later they worked in the Port Huron machine shops. Their careers are inseparable for where one went, there went the "Dodg e brothers."

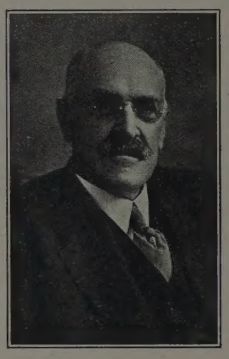
Opportunity in Port Huron was limited and so the brothers went to Detroit in 1886, where they started work in the Murphy Engine Co. shop. Later they went to Windsor and became machinists in the Dominion Typograph Co. plant, which they eventually became able to lease. Selling out to a Canadian bicycle concern, the brothers returned to Detroit to open a machine shop, the business of which developed slowly. Their first big contract came from the Olds Motor Works and called for three thousand gear sets. It was handled successfully and from that order dated the success which they achieved.

Henry Ford saw their possibilities and gave them an opportunity when he asked their help in the building of the Ford car. Later they entered the automobile business for themselves and established the well-known firm of Dodge Brothers.

Horace E. Dodge became a member of The American Society of Mechanical Engineers in 1915.

PRESLEY J. FICKINGER

Presley J. Fickinger, chief engineer of the Pittsburgh & Conneaut Dock Co., Conneaut, Ohio, died on December 11, 1920. Mr. Fickinger was born on January 12, 1858, in Girard, Pa. It was in Kingsville, Ohio, however, that Mr. Fickinger gained his elementary education, later receiving further mechanical training in Syracuse, N. Y.



P. J. Fickinger

For four years he worked with the Phoenix Iron Works at Ashtabula, Ohio, leaving to become connected with the Straight Line Engine Co., Syracuse, N. Y., where he became closely associated with Prof. John E. Sweet, Past-president Am.Soc.M.E. Mr. Fickinger's entire business life was linked with the steel industry. Twenty years ago he assumed the position of master mechanic on the local docks in Conneaut. He became an authority on mechanics and advanced rapidly through the ranks till he became chief engineer of the Pittsburgh & Conneaut Dock Co. Mr. Fickinger was associated with George Hulett of Cleveland in the perfecting of the first automatic ore-unloading machinery, and at his death held an interest in the Hulett patents. He also held several patent rights in his own name.

Mr. Fickinger became a member of The American Society of Mechanical Engineers in 1888. He also belonged to several clubs and organizations in Conneaut and elsewhere, including the masonic fraternity.

ARCHIBALD STEVENSON McLUNDIE

Archibald S. McLundie, first lieutenant, Ordnance Department, U. S. Army, died on September 14, 1920, at Fox Hills Hospital, Staten Island, N. Y. Lieutenant McLundie was born in Glasgow, Scotland, in 1889, and obtained both his education and early experience in that city. His first connection in this country was with the Reliance Machine & Tool Co., St. Louis, Mo., from 1906 to 1907, as a designer of brickmaking machinery. Later he became associated with the Arnold Co., Chicago, where he remained until 1908. The following year he became engaged in the design and development of steam turbines for the E. W. Bliss Co., Brooklyn. From October 1911 to August 1912 he was connected with the Montague Mailing Machine Co. Chattanooga, Tenn., as machine designer. At that time he entered business for himself in that city as mechanical engineer and patent attorney.

Lieutenant McLundie served in the Ordnance Department of the U. S. Army throughout the war. At the time of his death he had not received his discharge but had been retained as mechanical draftsman for the Ordnance Department and was attached to an arsenal in New York. He had been cited to receive the Belgian War Medal for meritorious service in his particular line.

Lieutenant McLundie was a member of several Scottish societies and other fraternal organizations. He became a junior member of the A.S.M.E. in 1915.

CLEON EDGAR PHELPS

Cleon E. Phelps, plant engineer, the Allen Spool & Wood Turning Co., Mystic, Conn., died on December 16, 1920. Mr. Phelps was born in Leominster, Mass., in November 1889, and received his early education in the schools there. Later he attended Worcester Polytechnic Institute, from which he received his B.S. in 1913. From 1913 to 1915 he was connected with the American Steel & Wire Co., Worcester, Mass., his work there being of an experimental nature. From 1915 to 1917 he was with the American Optical Co., Southbridge, Mass., engaged in development work. The following year he became assistant director of the mechanical engineering shop laboratories of the University of Illinois, and sreved as a machine-gun instructor during the summer months. In 1918 Mr. Phelps entered the service as a second lieutenant in the Ordnance Department of the U. S. Army. He was located as a production officer of small arms at the Marlin-Rockwell plant in New Haven, Conn. Upon leaving the service in 1919 he became factory manager of the Embossograph Products Corporation, Salem, Mass.

Mr. Phelps became a junior member of the Society in 1914. He was also a member of the American Legion and of the American Ordnance Association and of several fraternal organizations.

RICHARD D. KIMBALL

Richard D. Kimball, president of the Richard D. Kimball Co., Boston, Mass., died on November 10, 1920, at Alton Bay, N. H., his summer home. Mr. Kimball was born on September 16, 1847, in Rochester, N. H. His first employment was with the Prentice knife shops in Greenfield. From 1881 to 1887 he was with the Millers Falls Tool Co., Millers Falls, Mass., as superintendent of the vise shop. While there he invented several attachments for the machines. In 1888 he located in Boston, being interested in a passenger-car heating system which he had invented and patented. Mr. Kimball was also for a short time New England representative for the Johnson Service Co. and in 1897 entered the heating and ventilating engineering business under his own name.

His first large piece of work was the central heating plant at Dartmouth College, which was followed by installations at Groton School, Mount Holyoke College, Wellesley College and many others. Mr. Kimball invented a conduit system of split tile for steam pipes which was patented in 1899 and later sold to the H. W. Johns-Manville Co. His business was incorporated in 1908 under the name of the Richard D. Kimball Co., and his engineering work extended from Canada to Georgia and Kentucky, and west to North Dakota.

Mr. Kimball was a member of the Boston City Club and of several church organizations. He became a member of The American Society of Mechanical Engineers in 1906.

WILLIAM H. SAYRE

William H. Sayre, president of the American Abrasive Metals Co., died suddenly at his home in Glen Ridge, N. J., on January 6 from a severe heart attack. Mr. Sayre was born at Mauch Chunk, Pa., in September, 1865. He was graduated from Lehigh University as a mechanical engineer in 1866. Beginning his practical experience in railroad building in the Northwest, in which he became associated with John B. McDonald, Mr. Sayre later became well known as president of the International Contracting Co., executing many important dredging contracts in New York and other harbors and being called upon to act as a consulting engineer on the Cape Cod Canal.

He was among the first to apply electric welding commercially, organizing the Federal and the Anthracite Electric Welding Companies. In the safety engineering field he was known for his development of the American Abrasive Metals Co., of which he was president until the time of his death.

Mr. Sayre was a member of the American Society of Safety Engineers and was instrumental in its successful reorganization. He became a member of The American Society of Mechanical Engineers in 1911 and served on its Boiler Code Committee, in which he was especially interested.

L. D. YORK

L. D. York, president of the Portsmouth Street Railroad and Light Company, Portsmouth, Ohio, died on September 19, 1920. Mr. York was born in England in 1847. He served an apprenticeship as roll turner in England and served also in that capacity in the Passaic Rolling Mills, Paterson, N. J., in 1869. From 1869 to 1889 he acted as superintendent in various rolling mills, his last connection being with the Burgess Steel and Iron Company. Mr. York joined the Society in 1889.

EMPLOYMENT SERVICE BULLETIN

Conducted by the Employment Service of The Federated American Engineering Societies, 29 West 39th Street, New York

POSITIONS AVAILABLE

Stamps should be enclosed for transmittal of applications to advertisers: non-members must accompany applications with a letter of reference or introduction from a member; such reference letter will be filed with the Society's records.

INSTRUCTORS: All engineers willing to consider teaching positions are invited to register with the Employment Service Bureau of the Federated American Engineering Societies. This Service Bureau has been called upon to fill more positions, varying in grade from laboratory assistant to head of department in various engineering and technical schools of this country, than it has been able to do from among the men now registered. Blanks for the purpose of registration and information regarding the Bureau may be had by addressing W. V. Brown, Manager, 29 West 39th Street, New York, N. Y.

GRADUATED MECHANICAL ENGINEER WANTED, preferably with pulp and paper-mill experience for large Canadian sulphite mill. State age, experience, salary expected and enclose copies of references. Location Canada. Z-2627.

SALES ENGINEER. One familiar with boiler and furnace maintenance and operation, to handle line of furnace specialties in middle west. Salary and commission. Good opportunity. Write, giving experience, training, etc. Z-2664.

RECENT ENGINEERING GRADUATES for developing and using new testing machines for sheet metal. Some machine-shop or machine-design experience desirable, but not essential. Candidates are especially desired with extensive training in engineering physics and mathematics; desirable personality essential. Location Washington, D. C. X-3.

MECHANICAL ENGINEER for veneer-package plant, steam power-plant operation; electrical plant operation and maintenance; woodworking machine maintenance; planer-saws, veneer lathe and clipper, stapling machines, tenoner nailers. Location Ga. X-4.

CHIEF ENGINEER for steam plant. Some knowledge of electricity desirable. Also chief engineer for same plant. Location Conn. X-6.

SALES MANAGER and SALES ENGINEER. Electric heating appliance (especially for domestic cooking) experience desirable. Must have sales manager experience. Location Wisconsin. X-12.

MANAGER for manufacturing and selling machines for labeling cans. Desire man with some practical merchandising experience, and some substantial knowledge of production. Particularly interested in one with merchandising ability, and the knowledge of how to develop sales and dispose of such a product. Location New York. X-13.

MACHINERY SALESMAN, C.E. or M.E., about 30 years old, Protestant, single, preferably with some experience in construction work and also in sale of machinery in Eastern States. Must have agreeable personality, be steady and ambitious worker. Work will be largely helping agents with sales and promoting their interest in our lines. Headquarters probab y New York office but perhaps at some other city in New York territory. Most of time probably spent away from headquarters. Location New York City or vicinity. Application by letter only. X-17.

ENGINEER with broad textile experience to write text book and conduct correspondence course in spinning and weaving. Application by letter only. Location New York City. X-18.

SALES EXPERT and SALES PROMOTION MAN with thorough experience in direct and magazine advertising, knowledge printing and electrotype requirement. Able to write "Peppy" copy. Send sample of work. Electrical experience desirable. Age 26 to 29, not over. X-23.

PLANT ENGINEER with technical training and capable of taking full charge of electrical heating, maintenance of buildings, as well as planning and erecting of all new buildings and installing machinery. Location Massachusetts. X-25.

MECHANICAL ENGINEER experienced in designing automatic feeds for power presses and conveyor systems. Experience in automatic machinery essential. Application by letter. Location Conn. X-28.

MECHANICAL ENGINEER to develop and improve labor-saving machinery. Location New York City. X-40.

ENGINEER experienced in die making and drawing of sheet metal and construction of sheet-metal machinery. Experience of foreman in sheet-metal shop manufacturing sheet-metal dies and special stamping machinery. Man between 35 and 45 preferred. Must also have production experience. Location Ia. X-49.

WORKS MANAGER or SUPERINTENDENT with experience in manufacture of water-tube boilers that will qualify him to take charge of production in factory; establish proper system for routing shop orders; see that they are properly carried out; that contracts are carried out to fullest extent possible, as far as work in factory is concerned. Location Illinois. X-50.

SALES MANAGER experienced in rubber tires. Application by letter only. Location New York City. X-51.

GENERAL PUBLIC SERVICE ENGINEER. Value experience. Primary; recent, extensive, detail work on garbage-reduction, sewers and highways. Secondary: street-railway construction and operation. Tertiary: water-supply, gas and electrical plant operation and cost, fire-protection, town-layout, housing, railroad terminals, concrete. Good technical education. A city manager might qualify. No salary limit except capacity of man. Location Michigan. X-57.

INSTRUCTOR IN DRAWING. Position open immediately. Location Ohio. X-61.

ASSISTANT to head of mechanical-engineering and steam power-plant departments, of our Extension Division. Preferably graduate from one of leading technical schools, with degree of M.E. Prefer one with both practical and teaching experience and qualified to act as assistant in preparation of lessons in various subjects connected with mechanical engineering, including shop practice. Location New York City. X-64.

YOUNG ENGINEER with executive ability with refrigerating or power-plant erecting experience. Good opportunity with young growing manufacturing concern in Newark, N. J. X-65.

ADVERTISING SOLICITOR. Young man must have had actual sales experience in railway-equipment field and know buyers. X-66.

HIGH-GRADE SALES ENGINEER. Must be live wire—one acquainted with power-house equipment. Salary and commission of from eight to ten thousand dollars a year. Prefer man between 30 and 40. No one will be considered whose past sales record does not prove him worth this amount. Position now open. Location Illinois. X-68.

MECHANICAL DRAFTSMAN; four or five years' experience on oil-refinery design, particular attention to be given to pipe lines, pump manifolds and still designs. Location New England States. X-75.

REFRIGERATING ENGINEER, young and energetic in estimating and sales-engineering department, with both theoretical and practical experience in special line of ice making and refrigerating machinery. Must be qualified to handle inquiries, estimate all engineering requirements pertaining thereto, prepare complete specifications and contract forms ready for purchaser with guarantees attached. Location. Wisconsin. X-76.

CHIEF DRAFTSMAN, experienced in air compressors. Must understand theory of compressed air and be able to design. Steam-pump experience will be considered. Location Illinois. X-90.

GENERAL MANAGER, for concern manufacturing trailers. Capable of handling all details of this business. Location New Hampshire. X-97.

CHIEF OPERATING ENGINEER, for two power

houses. One plant consisting of five 350 hp. B. & W. boilers, one 1250 kw. Westinghouse turbine, one 300 kw. bleeder-type Westinghouse turbine, one 1250-hp. compound engine in our rolling mill. Other plant has eight 50-hp. h.r.t. boilers, one Westinghouse turbine, one De Laval and one Curtis turbine, running condensing, a 500-kw. motor-generator set and two single-cylinder Corliss engines direct-connected to rolls. Location Connecticut. X-102.

MECHANICAL ENGINEER for executive position with company manufacturing cereal beverages. Must be able to look after maintenance of plant such as boiler problems, etc. Good future. Location South. X-106.

SALESMEN with proper training to handle automobile merchandising intelligently. Commission basis. Men with initiative, strong personality and who have been more or less in direct contact with the buying public. Location New York City. X-111.

SALESMEN to place on market some tools of new design used in ship building and railroad industries. Company also about to open sales campaign to distribute high-speed steel, hardened by process recently discovered. X-115.

SUPERINTENDENT of machine shop making paper-mill and textile machinery. Must be thoroughly experienced in modern practice and good executive. American only. Prefer man 35–40 years. Location New England. X-118.

ENGINEER with considerable experience in industrial plant layout and design. Must have executive ability. Write fully, giving age, experience and salary expected. Location Middle West. X-127.

ENGINEER who will take over one-third interest and assume entire management of company building coasters, carousels, toboggan sleds and equipment. Should not only be able to assume executive charge of business but should also have good mechanical ideas. Location Pennsylvania. X-138.

EXCELLENT OPPORTUNITY offered in Shanghai, China, for thoroughly experienced designing, erecting, power-plant engineer to handle well-known equipment for established export organization. Able to finance any installation. Willing to give responsible capable engineer good salary and opportunity to secure up to twenty thousand dollar interest partnership in firm. Only high-grade financially able man considered. Give detailed experience, references first letter. All confidential. X-142.

TWO EXECUTIVES. Directors of established concern manufacturing hardware line, screw-machine products and operating brass and aluminum foundry. Have opportunity for two experienced men. Manager to have full charge of business. Superintendent to have full charge of factory and foundry. Small investment required in each case to insure interest. Business located in large city near New York. In business over 20 year. X-146.

EXECUTIVE TREASURER, must be engineering or college graduate capable of taking complete charge of finances of engineering manufacturing corporation. High-class man with good connection willing to invest after examination. Location New York City. X-157.

AMBITIOUS YOUNG MEN, ten, for salesman's training course, with company manufacturing pumps. Must have vision enough to take full advantage of extensive shop and office training and must be capable of development into high grade representatives. Engineering degree required. Application by letter. X-165.

MEN AVAILABLE

Only members of the Society are listed in the published notices of this section. Copy for notices should be on hand by the 5th of the month preceding date of issue and should be limited to 45 words. The form of notice should be such that the initial words indicate the classification. Notices are not repeated in consecutive issues.

Notices for "Mechanical Engineering" are not acknowledged by personal letter; unless the applicant is otherwise advised, his notice will appear in the issue following its receipt.

Correspondence relating to replies to advertisements will be held in the Service Bureau for one month only.

MECHANICAL ENGINEERING GRADUATE, desires position in machine designing or testing. Practical experience: 8 months in large steel foundry; 6 months in design and standardization of conveying machinery; pilot in Air Service during war. Age 24, single. SM-5959.

CONSULTING ENGINEER, age 27. Six years' experience with power plant equipment and machine tools, as machinist, draftsman, production manager, mechanical engineer and chief engineer. Desires position with firm of industrial engineers. Present salary $2100. SM-5960.

MECHANICAL ENGINEER. Technical graduate; age 42; married. Twelve years in India. Industrial and technical instruction; building design and construction; executive. Available at present for U. S. A.; later for Orient. SM-5961.

MECHANICAL ENGINEER specializing in invention, research and machine design would like to work out mechanisms, machines or processes on salary, by contract or on contingent fee. SM-5962.

ASSISTANT TO WORKS MANAGER. Industrial and mechanical engineer now employed with old and reliable paper mill; technical education; age 33; 10 years with same company. Draftsman, chief draftsman, mill engineer; development engineer at present time. Development of methods to increase production, lower costs, and improve quality. Boston vicinity preferred. SM-5963.

SALES or EXPORT EXECUTIVE, age 37; married. Technical training, mechanical and electrical engineering. Five years' experience shop, drafting, construction; 7 years' sales engineering; 5 years' manager export house handling technical lines. Broad knowledge machinery and supplies. Initiative and organizing ability. Spanish. Would like to locate with manufacturer as sales or export manager. Location immaterial. SM-5964.

MECHANICAL ENGINEER, age 27, desires executive position, vicinity New York City. Preferably production work; 15 months' experience steam engineering work U.S.N.R.F., released as Lieutenant (j.g.). Have held positions as head of planning department and chief inspector. Salary $2500 year. SM-5965.

MECHANICAL ENGINEER, graduate Middle Western University. Present position, charge of production, steel purchasing, planning, estimating, all correspondence pertaining to production, drop forge plant. Desires executive or semi-executive position, not necessarily drop forging. Middle West or Coast preferred. Age 29; married. SM-5966.

MECHANICAL ENGINEER, college graduate, with twenty years' active experience in designing, producing and selling heavy machinery, desires position as chief engineer or general superintendent in charge of production. Capable of developing, manufacturing and selling a new product. SM-5967.

FACTORY SUPERINTENDENT and mechanical engineer. Fifteen years' experience in development and manufacture of typewriters and adding machines, along most modern lines. High-grade practical man with successful executive record. Best of references. Age 39. SM-5968.

SUPERINTENDENT or PRODUCTION MANAGER, technical graduate. Varied experience both in designing and manufacturing supervision. Have held positions where intensive and accurate production was essential. At present employed but desires change. Location immaterial. SM-5969.

POWER-PLANT ENGINEER, graduate, age 34. Ten years' experience in power-plant, estimating, design, construction and operation; also in detail design of all first-class prime movers; just returning from reconstruction work in Europe. Desires position as executive or mechanical expert in established consulting engineers office. Location immaterial; traveling no objection. Salary commensurate with responsibility. SM-5970.

INSTRUCTOR or ASSISTANT PROFESSOR of mechanical engineering. Technical graduate with 5 years' of shop, drafting room, research and teaching experience, desires position on faculty of engineering institution. Age 30; married. SM-5971.

MECHANICAL DESIGNING ENGINEER desires to form permanent connection with small manufacturing company in Middle West. Technical graduate with 14 years' in design, engineering, and administrative work. At present engineer of automotive accessories company. Particularly qualified to take responsible charge of engineering and experimental work and to work out revised designs to reduce manufacturing cost. SM-5972.

MECHANICAL ENGINEER, technical graduate, age 30; married; 8 years' experience in maintenance and plant layout, railroad motive power-department and non-ferrous rolling and seamless tube mills. SM-5973.

PRODUCTION SUPERINTENDENT, with many years' experience in modern management methods including Gantt and other systems. Desires change and permanent association with concern requiring such a man. SM-5974.

INDUSTRIAL ENGINEER. Graduate; with train ing in organization and management, planning an time study, cost finding, factory layout and equi ment, machine-shop practice. One year in texti industry; two years in army as Captain of engineer one year with nationally known arms and an munition plant. Age 28; married. Desires pos tion with progressive industry or firm of industri engineers. SM-5975.

MECHANICAL ENGINEER, age 25; single. Eigh and one-half years' experience on design, constru tion and inspection of various large industri developments from design to operation, *viz.*, stea power plants, brass-rolling mills and manufacturin plants, etc. Mechanical and structural. Capab of assuming responsibility. Will locate anywhe or travel. SM-5976.

FACTORY SUPERINTENDENT and mechanic engineer, age 45, wants change. Twenty-fiv years' successful experience as foreman and gener superintendent in large middle west and easter plants manufacturing high-grade machinery an fine tool equipments. A-1 record and referenc from past and present employers. At presen superintendent of Pacific Coast plant. SM-5977.

MECHANICAL SUPERINTENDENT, with broa training and experience in engineering, construc tion, maintenance and extensive plant improve ments. Strong and economic executive wit proven ability to organize and get results. Ex cellent clientele among men of broad caliber. Ag 33; American; good health. SM-5978.

FACTORY MANAGER or INDUSTRIAL ENGI NEER, age 42; married. Seventeen years' ex perience handling production in various lines, i charge of organizations varying from 100 to 300 men, filling positions ranging from shop forema to manager. Familiar with safety work, fire pro tection, and modern employment management Highest references. SM-5979.

MECHANICAL ENGINEER, age 34; married University graduate. Ten years' R. R. experienc in maintenance construction, operation, powe plants, water, coal and ash handling, etc. Fou years' experience in selling, designing, constructing and contracting on power plants and water supplie and in selling power-plant equipment. Present salary $6000. Desires connection which promise chance for future. SM-5980.

STEEL MILL ENGINEER, technical graduate age 31, American. Nine years' experience in rolling mill, blast furnaces, and coke plants a foreman, assistant steam engineer, erecter of powe houses and master mechanic. Present positio master mechanic of large by-product coke plant Desires work as coke-plant master mechanic mechanical engineer or assistant chief engineer of steel mill or connection with consulting engineer in allied lines. Location immaterial. Salary $5000 SM-5981.

GRADUATE MECHANICAL ENGINEER, ag 30, single. Five years' experience; 2 years in the Mid-Continent oil fields, as mechanical engineer for gas department of prominent oil company. Experience covered testing of gas engines, vacuum pumps, and meters, casinghead gas for gasoline content, efficient utilization of gas on leases, etc. Desires position in oil fields. SM-5982.

MECHANICAL and ELECTRICAL graduate with three years' experience in mechanical line. SM-5983.

MECHANICAL ENGINEER or assistant, age 25. Technical graduate. Desires position with future. Four years' practical experience in various capacities. Draftsman and designer; factory maintenance, production. SM-5984.

MAINTENANCE ENGINEER, over 20 years' experience in steel works, as construction and maintenance engineer. Specialties: open hearth, crucible, heating and annealing furnaces, rolling mills and hydraulic presses. SM-5985.

MECHANICAL ENGINEER, plant executive, age 34. At present mechanical superintendent for modern chemical plant; 10 years' experience in design, construction and maintenance work; 3 years' experience in sales office with company manufacturing heavy machinery; familiar with mining and general heavy equipment. Desires connection with manufacturing plant. SM-5986.

MASTER MECHANIC or plant engineer, American, age 32. Ten years' experience in design, installation, maintenance and successful handling of labor. Salary $5000. SM-5987.

EXECUTIVE ENGINEER. Technically trained electrical mechanical engineer; 15 years' experience in design, construction, manufacture and operation. Accustomed to handling proposition in its entirety from design to operation including executive, technical, cost and accounting features. Present salary about $500. Open to permanent engagement with an organization having future. SM-5988.

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